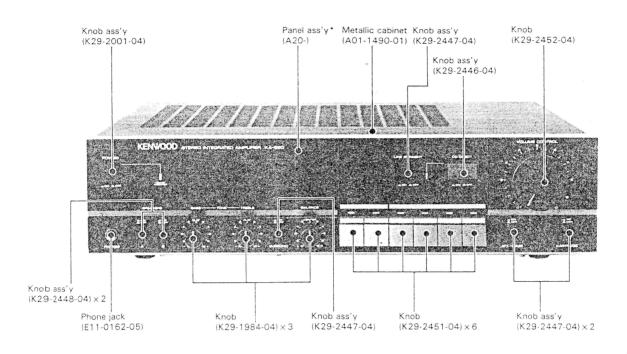
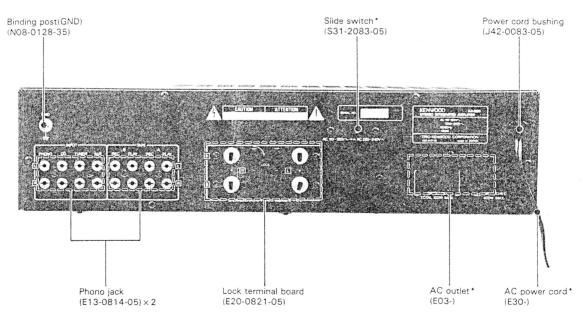
SERVICE MANUAL

KENWOOD

TRIO-KENWOOD CORPORATION

©1986-4 PRINTED IN JAPAN B51-1966-00(T)1221

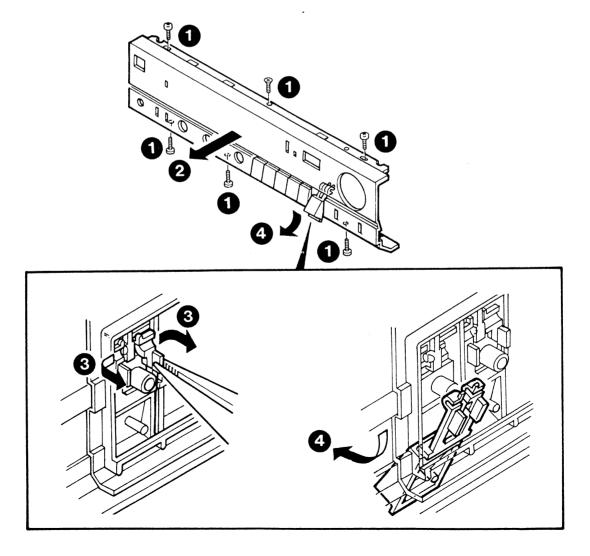






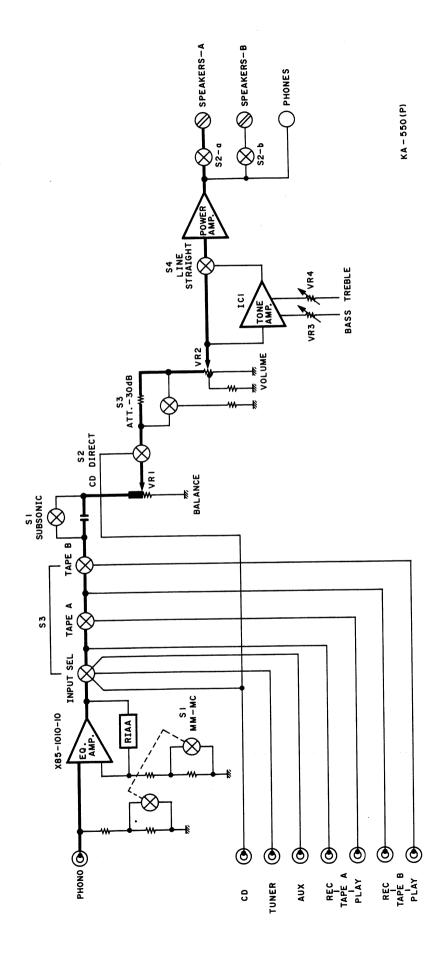
DISASSEMBLY FOR REPAIR

- 1. Remove the six screws mounted on the upper and lower section of the front panel.
- 2. Remove the front panel from the main body.
- Hold the lug protruded from the back of the front panel with pliers, and remove the knob in the direction of the arrow.
- 4. Remove the knobs in the direction of an arrow.



KA-550 KA-550

BLOCK & LEVEL DIAGRAM



CIRCUIT DESCRIPTION

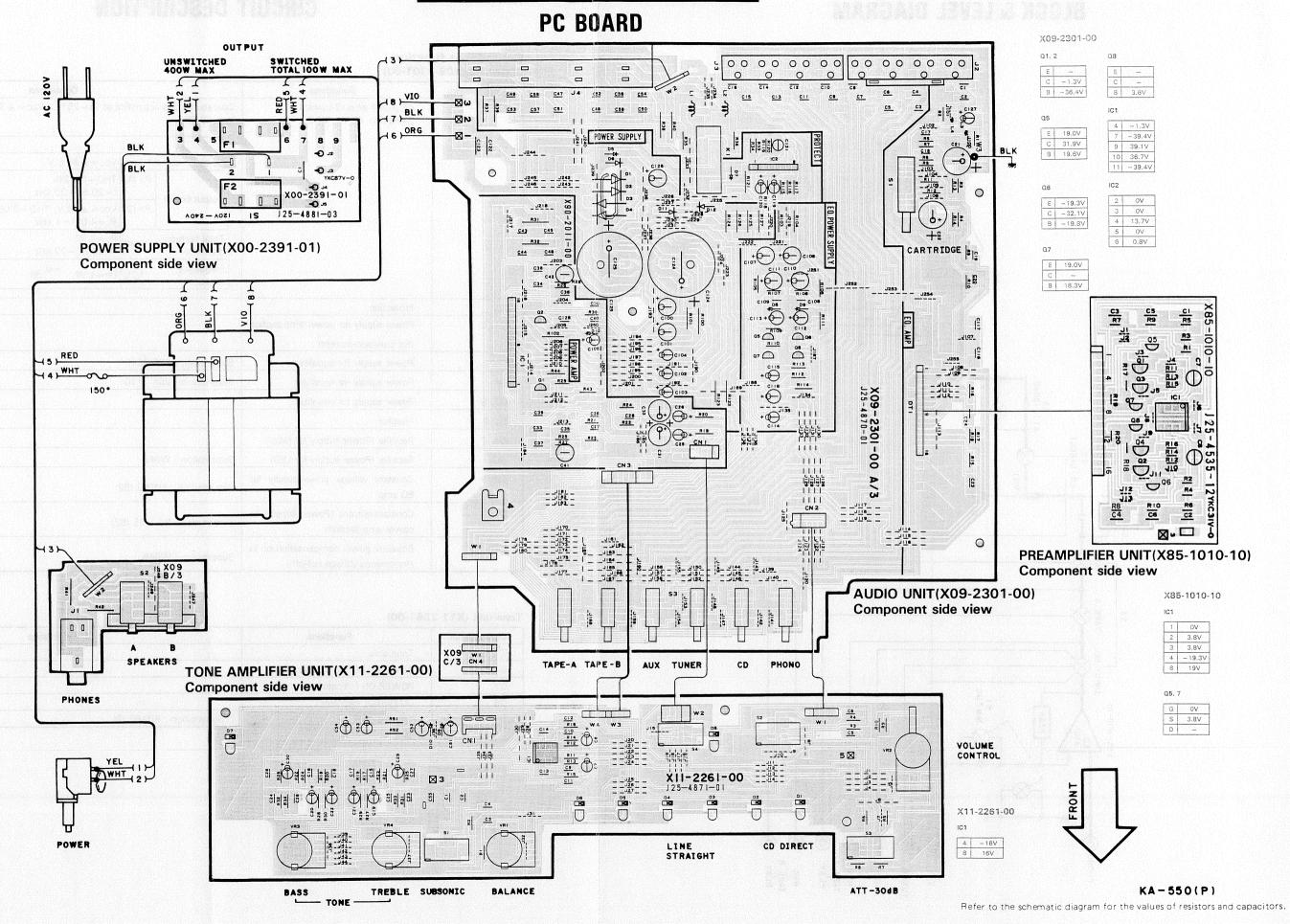
Component function Audio unit (X09-2301-00)

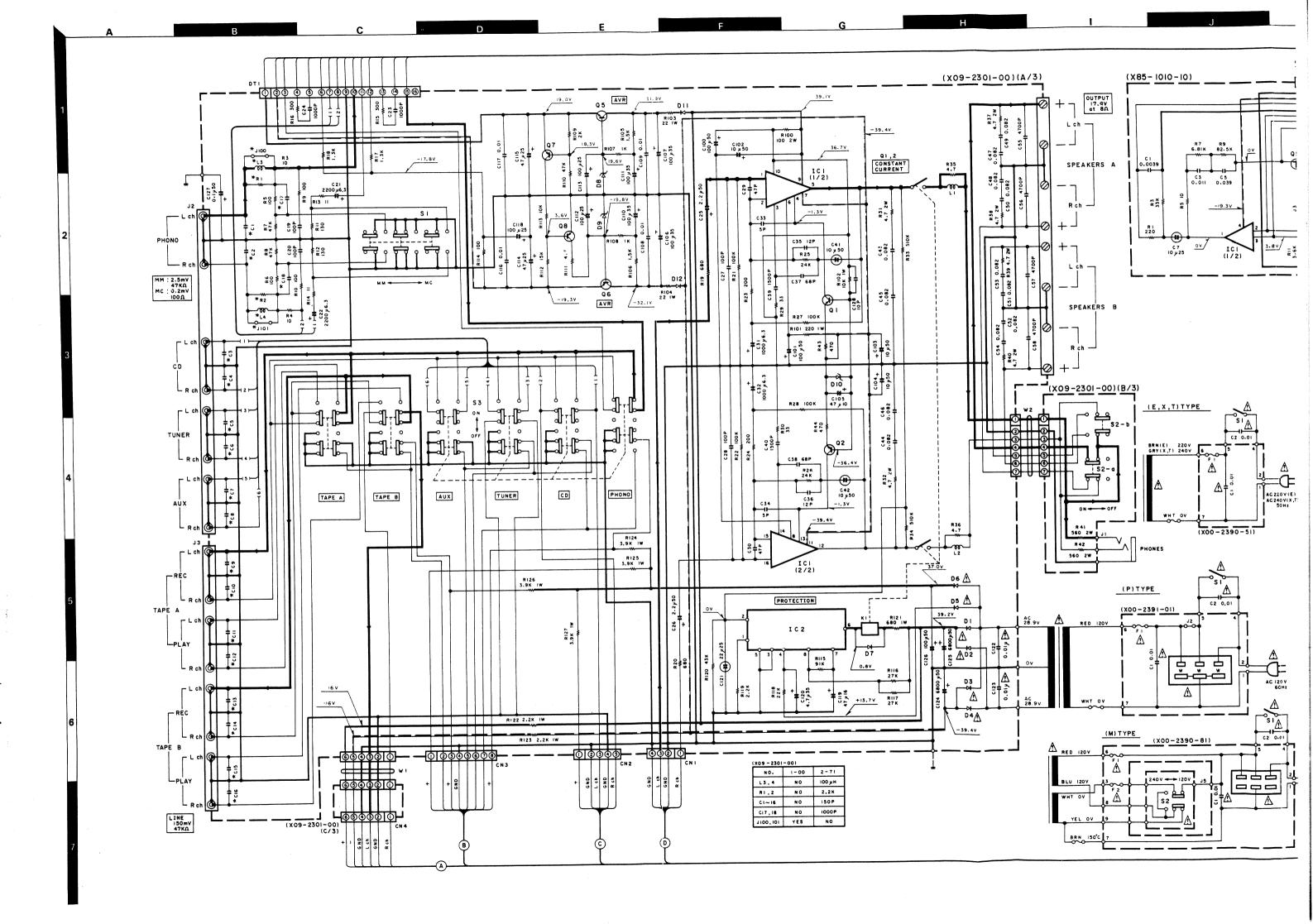
Components	Functions	Operations						
IC1	AF power amp (2-current, 2-channel. 40 W, Min)	Operational characteristics at Ta = 25° C, Vcc = \pm 32 V _o = 40 dB				$V, R_L = 8 \text{ ohms},$		
					min	typ	max	
		No-signal curre	nt Icco	Vcc= ±38.5 V	35	70	120(mA)	
				THD = 0.02% f = 20 Hz ~ 20 kHz	40	_	— (W)	
		Output power	Po (2)	Vcc = ± 29 V, THD = 0.08% RL = 4 Ω , f = 1 kHz	45	_	—(W)	
		Total harmoni distortion	THD	Po = 1 W f = 20 Hz ~ 20 kHz	_	_	0.02(%)	
		Frequency responce	f _L , f _H	$Po = 1 \text{ W}, \frac{+0}{-3} \text{ dB}$	10	0 ~ 1	00 K(Hz)	
IC2	Protection							
Q1, 2	Power supply for power amp section							
	(for constant-current)							
Q5	Power supply for equalizer	Substitution: 2S	C 2590					
Q6	Power supply for equalizer	Substitution: 25	A 1110					
Q7, 8	Power supply for equalizer							
D1-4	Rectifier							
D5, 7	Rectifier (Power supply for relay)							
D6	Rectifier (Power supply for LED)	Substitution : W	06B					
D8, 9	Constant voltage power-supply for EQ amp	Sub stitution : R	D20J (E	32)				
D10	Constant-current (Power supply for power amp section)	Substitution : RI	2.7E (B2)				
D11, 12	Equalizer power compensation on in stantaneous voltage roll-off	Substitution: W	06В					

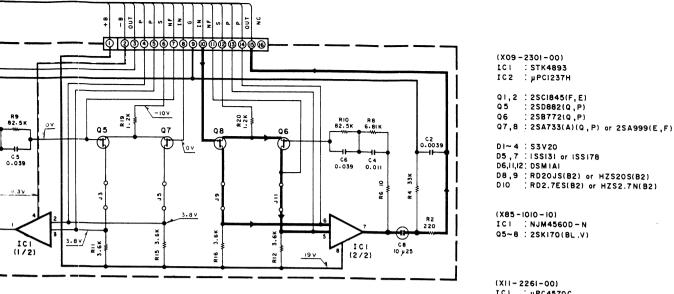
Tone unit (X11-2261-00)

Components	Functions	Operations
IC1	Tone amp	
D1-6	INPUT SELECTOR indicators	
D7	POWER ON indicator	
D8	CD DIRECT indicator	
D9, 10	Tone power	Substitution: RD16E (B)

KA-550 KA-550

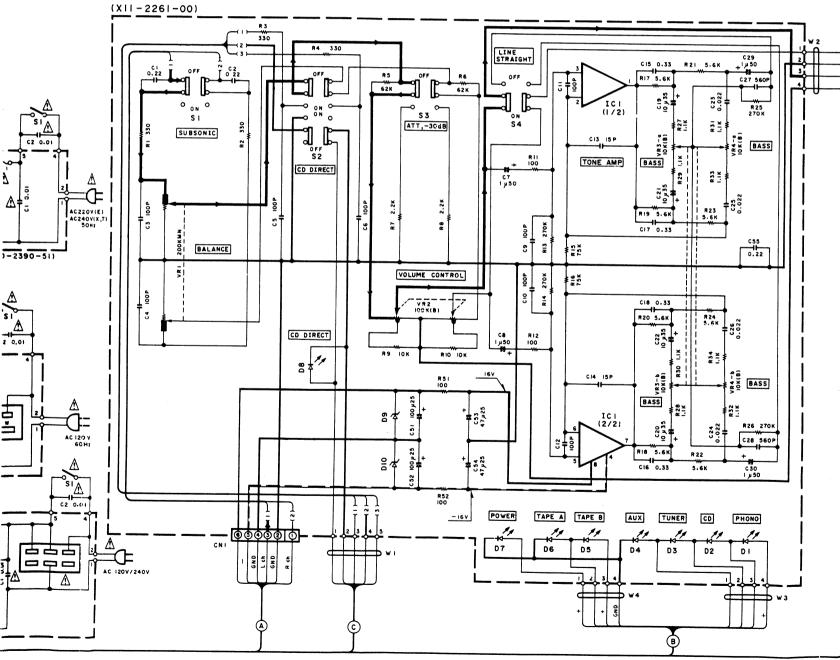






ICI : µPC4570C

D1~8 : B30-1012-05 D9,10 RD16ES(B) or FZS16N(B)



KA-550(P)

SPECIFICATIONS

POWER OUTPUT

40 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.

 PHONO (MC)
 (B6 dB
 75 dB

 TUNER/CD/AUX/TAPE
 105 dB
 82 dB

 Output Level/Impedance
 150 mV/220 ohms

 TAPE REC
 150 mV/220 ohms

 REC OUT
 150 mV/220 ohms

 Cannels Separation (DIN) at 1,000 Hz

 PHONO (Terminated with 2.2 k ohms)
 50 dB

 AUX (Terminated with 47 k ohms + 250 pF)
 40 dB

General

| W 420 mm (16-9/16*) | H 113 mm (4-7/16*) | D 311 mm (12-1/4*)

Weight (Net) 6.3 kg (13.86 ib) (Gross) 7.0 kg (15.4 ib)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui doncerne le développement, Pour cette raison, les spécifications sont sujettes à modifications sans préavis. Kenwood strebt standige, Verbesserungen in der Entwicklung an, Daher bleiben Anderungen der technischen Daten jederzeit vorbehalten.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanden die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.



2SA733(A) 8 2SA999 2SC1845



UPC1237H



2SB772



UPC4570C



s 2SK17

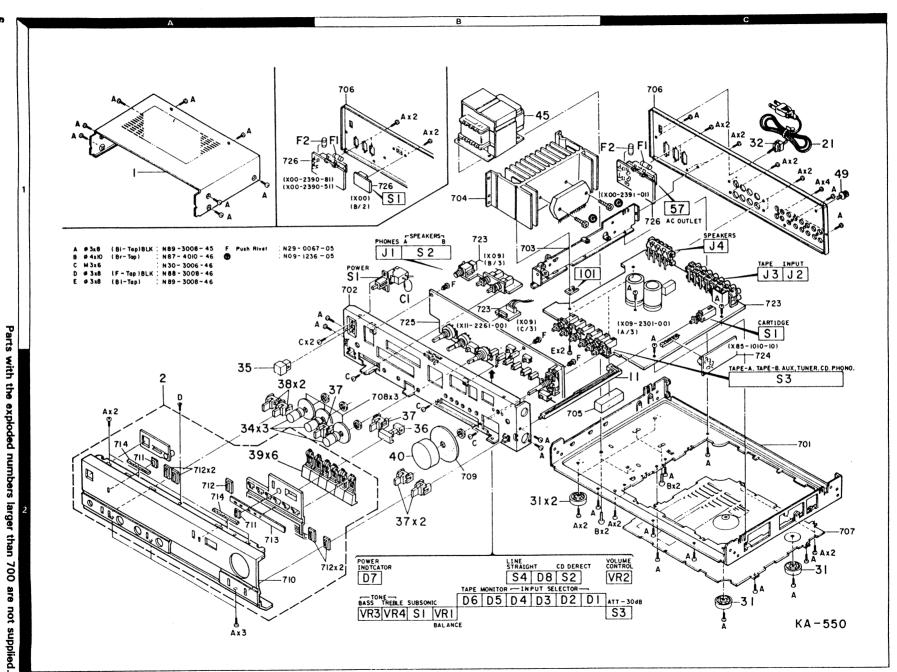


•



NJM4560D-N





6



× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht gellefert.

	Ref. No.	Address	New Parts	Parts No.	Description	Desti- Re-			
	参照番号	位置	₹ T	部品番号	部品名/規格	仕 向 備考			
	KA-550								
	1 2 2	1A 2A 2A	* * *	A01-1470-01 •A20-4896-03 A20-4910-03	METALLIC CABINET PANEL ASSY PANEL ASSY	T EPMX			
	- - - -		*	B46-0096-13 B46-0121-03 B46-0122-13 B46-0123-03 B50-6213-00	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL(ENGLISH)	X P E T			
	- - - -		* * * *	B50-6214-00 B50-6215-00 B50-6216-00 B50-6217-00 B58-0245-33	INSTRUCTION MANUAL(FRENCH) INSTRUCTION MANUAL(D,G,I) INSTRUCTION MANUAL(SPANISH) INSTRUCTION MANUAL(ENGLISH) CAUTION CARD (FTZ)	EPMX E M EPMX E			
4	C2 C2	1B 1B		C91-0023-05 C91-0647-05	CERAMIC 0.01UF AC250V CERAMIC 0.01UF P	M EPXT			
	11	2C		D21-1104-03	EXTENSION SHAFT(MM/MC)				
	21 21 21 21 21	1C 1C 1C 1C 1C		E30-0459-05 E30-0812-05 E30-0974-05 E30-1341-05 E30-1416-05	AC POWER CORD	E M P X T			
△	F1 F1 F1 ,2	1C 1C 1C		F05-1623-05 F06-3023-05 F05-1521-05	FUSE (SEMK®) (250V T1.6A) FUSE (UL) (250V 3A) FUSE (250V 1.5A)	EXT P M			
	- - -		* * *	H01-7188-04 H01-7189-04 H10-1898-02 H10-1899-02 H25-0225-04	ITEM CARTÓN CASE ITEM CARTÓN CASE POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG (850X450)	EPMX T			
	-			H25-0232-04	PRØTECTIØN BAG (235X350)				
Δ	31 32 -	2B,2C 1C		J02-0129-05 J42-0083-05 J61-0307-05	FOOT POWER CORD BUSHING WIRE BAND				
	34 35 36 37 38	2A 2A 2B 2B 2A	* * *	K29-1984-04 K29-2001-04 K29-2446-04 K29-2447-04 K29-2448-04	KNOB KNOB ASSY (POWER) KNOB ASSY (CD DIRECT) KNOB ASSY (SUB,ATT,CART,LINE) KNOB ASSY (SPEAKER)				
	39 40	2A 2B	*	K29-2451-04 K29-2452-04	KNOB (MONITOR, INPUT SELECTOR) KNOB (VOLUME)				
	45 45 45 45	1B 1B 1B 1B	* * *	L01-7181-05 L01-7182-05 L01-7185-05 L01-7187-05	PØWER TRANSFØRMER PØWER TRANSFØRMER PØWER TRANSFØRMER PØWER TRANSFØRMER	P E M XT			
	49 F	1C 1B,2B		N08-0128-35 N29-0067-05	BINDING POST (GND) PUSH RIVET (3.5X4.5)				
Δ	S1	1B		S40-1073-05	PUSH SWITCH				
Δ	49 F	1B,2B		N29-0067-05	PUSH RIVET (3.5X4.5)				

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe

T: England

U: PX(Far East, Hawaii) <u>UE</u>: AAFES(Europe)

X: Australia M: Other Areas ★ indicates safety critical components.



* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

١	Ref. No.	Address		Parts No.	De	scription		Desti- nation	Re-
	参照者号	位置	Perts ≸i	部品書号	部 品	名/規	格		備考
				POWER SUPP	LY(X00-2391-0)1)			*
	C1 C1			C91-0023-05 C91-0647-05	CERAMIC CERAMIC	0.01UF 0.01UF	AC250V P	M EPXT	
	57 57	1C 1C	* *	E03-0077-05 E03-0078-05	AC BUTLET AC BUTLET			M P	
	-			J13-0041-05 J13-0054-05	FUSE CLIP FUSE CLIP			PM EXT	
·	S1	1 B		S31-2083-05	SLIDE SWITCH	(POWER T	YPE)	M	
			,	AUDIO UNIT	(X09-2301-00				т
	C1 -16 C17 ,18 C19 ,20 C21 ,22 C23 ,24			CC45FSL1H151J CK45FB1H102K CC45FSL1H101J CE04KW0J222M CK45FB1H102K	CERAMIC CERAMIC CERAMIC ELECTRO CERAMIC	150PF 1000PF 100PF 2200UF 1000PF	J K J 6.3W∪ K	E	
	C25 ,26 C27 ,28 C29 ,30 C31 ,32 C33 ,34			CE04KW1H2R2M CC45FSL1H101J CC45FSL1H470J CE04KW0J102M CC45FSL1H050C	ELECTRO CERAMIC CERAMIC ELECTRO CERAMIC	2. 2UF 100PF 47PF 1000UF 5. 0PF	50WV J 6.3WV C		
	C35 ,36 C37 ,38 C39 ,40 C41 ,42 C43 -54		*	CC45FSL1H12OJ CC45FSL1H68OJ CK45FB1H152K C90-1400-05 CF92FV1H823J	CERAMIC CERAMIC CERAMIC NP-ELEC MF	12PF 68PF 1500PF 10UF 0.082UF	J K SOWV J		
	C55 -58 C100,101 C102-104 C105 C106,107			CK45FF1H472Z CE04KW1H101M CE04KW1H100M CE04KW1A470M CE04KW1V101M	CERAMIC ELECTRO ELECTRO ELECTRO ELECTRO	4700PF 100UF 10UF 47UF 100UF	Z 50WV 50WV 1 0WV 35WV		
	C108,109 C110,111 C112,113 C114,115 C116,117			CF92FV1H103J CE04KW1V101M CE04KW1E101M CE04KW1E470M CF92FV1H103J	MF ELECTRO ELECTRO ELECTRO MF	0.010UF 100UF 100UF 47UF 0.010UF	J 35WV 25WV 25WV J		
	C118 C119 C120 C121 C122,123			CE04KW1E101M CE04KW1C470M CE04KW1V4R7M C90-1353-05 CK45FE2H103P	ELECTR® ELECTR® ELECTR® NP-ELEC CERAMIC	100UF 47UF 4. 7UF 10UF 0. 010UF	25WV 16WV 35WV 25WV P		
	C124,125 C126 C127 C128			C90-0366-05 CE04KW1H101M CE04KW1H0R1M CC45FSL1H100D	ELECTRO ELECTRO ELECTRO CERAMIC	6800UF 100UF 0.1UF 10PF	50WV 50WV 50WV D		
	101 J1 J2 ,3 J4	1B 1B 1C 1C		E23-0125-05 E11-0162-05 E13-0814-05 E20-0821-05	TERMINAL PHONE JACK PHONO JACK LOCK TERMINA	(3P) (8P) NL BØARD(8P)		
	L1 ,2 L3 ,4			L39-0085-05 L40-1011-47	PHASE-COMPEN SMALL FIXED			E	
	G	1B,1C		N09-1236-05	TAPPING SCRE	W (3X16)		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe

T: England

U: PX(Far East, Hawaii) <u>UE</u>: AAFES(Europe)

X: Australia

M: Other Areas

★ indicates safety critical components.



× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht gellefert.

Ref No.	Ref. No. Address New Parts No.			Description	Desti- Re-
参照者号		Parts ≸i	部品番号	部品名/規格	nation mark
R31 ,32 R35 ,36 R37 -40 R41 ,42 R43 ,44			RS14DB3D4R7JTE RD14AB2E4R7JTS RS14DB3D4R7JTE RS14KB3D561JTE RD14AB2E471JTS	FL-PR00F RS 4.7 J 2W FL-PR00F RD 4.7 J 1/4W FL-PR00F RS 4.7 J 2W FL-PR00F RS 560 J 2W FL-PR00F RD 470 J 1/4W	
R100 R101 R102 R103,104 R105,106		* * *	RS14DB3D101JTE RS14DB3A221JTE RS14DB3A103JTE RS14DB3A220JTE RD14AB2E152JTS	FL-PR00F RS 100 J 2W FL-PR00F RS 220 J 1W FL-PR00F RS 10K J 1W FL-PR00F RS 22 J 1W FL-PR00F RD 1.5K J 1/4W	
R111 R114 R121 R122,123 R124-127		*	RD14AB2E4R7JTS RD14AB2E101JTS RS14DB3A6B1JTE RS14DB3A222JTE RS14DB3A392JTE	FL-PR00F RD 4.7 J 1/4W FL-PR00F RD 100 J 1/4W FL-PR00F RS 680 J 1W FL-PR00F RS 2.2K J 1W FL-PR00F RS 3.9K J 1W	
K1 S1 S2 S3	1C 1B 2C	* *	S51-2078-05 S40-6027-05 S42-2141-05 S42-6018-05	MAGNETIC RELAY PUSH SWITCH (CARTRIDGE) MULTIPLE PUSH SWITCH (SP) MULTIPLE PUSH SWITCH (M®N)	
D1 -4 D5 D5 D6 D7			S3V20 1SS131 1SS178 DSM1A1 1SS131	DINDE DINDE DINDE DINDE DINDE	
D7 D8 ,9 D8 ,9 D10 D10		* * *	155178 HZ5205(B2) RD20J5(B2) HZ52, 7N(B2) RD2, 7E5(B2)	DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE	
D11 ,12 IC1 IC2 Q1 ,2		*	DSM1A1 STK4893 UPC1237H 2SC1845(F,E) 2SD882(Q,P)	DIBDE IC(2CH AF PBWER AMP) IC(PRBTECTIBN) TRANSISTBR TRANSISTBR	
Q6 Q7 ,8 Q7 ,8			2SB772(Q,F) 2SA733(A)(Q,P) 2SA999(E,F)	TRANSISTØR TRANSISTØR TRANSISTØR	
	,		TONE AMPLIFIE	R UNIT(X11-2261-00)	
D1 -8	2B		B30-1012-05	LED(SLP-9810-50)	
C1 ,2 C3 -6 C7 ,8 C9 -12 C13 ,14			CF92FV1H224J CC45FSL1H101J CE04KW1H010M CC45FSL1H101J CC45FSL1H150J	MF 0.22UF J CERAMIC 100PF J ELECTRO 1.0UF 50WV CERAMIC 100PF J CERAMIC 15PF J	
C15 -18 C19 -22 C23 -26 C27 ,28 C29 ,30			CF92FV1H334J CE04KW1V100M CF92FV1H223J CK45FB1H561K CE04KW1H010M	MF 0.33UF J ELECTR0 10UF 35WV MF 0.022UF J CERAMIC 560PF K ELECTR0 1.0UF 50WV	
C51 ,52 C53 ,54 C55			CE04KW1E101M CE04KW1E470M CF92FV1H224J	ELECTR® 100UF 25WV ELECTR® 47UF 25WV MF 0.22UF J	
R51 ,52			RD14GB2E101JTS	FL-PR®®F RD 100 J 1/4W	

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe

T: England

U: PX(Far East, Hawaii) <u>UE</u>: AAFES(Europe)

X: Australia

M: Other Areas

▲ indicates safety critical components.



* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht gellefert.

Ref.	No.	Address	New Parts	Parts No.	Description	nation	
参照	番号	位 置	新	部品書号	部 品 名/規 格		備考
VR1 VR2 VR3 ,	. 4	2B 2C 2B	* * *	R06-5153-05 R06-5152-05 R06-3052-05	POTENTIOMETER(200K BH) BALANCE POTENTIOMETER(100K B) VOLUME POTENTIOMETER(10K B) TONE		
51 52 53	. 4	2B,2C	*	S40-2351-05 S40-4074-05 S40-2351-05	PUSH SWITCH (SUBSONIC) PUSH SWITCH (CD DIRECT) PUSH SWITCH (LINE, ATT)		
	10 10			HZS16N(B) RD16ES(B) UPC457OC	ZENER DIØDE ZENER DIØDE -IC(ØP AMP X2)		
		r			R UNIT(X85-1010-10)	1	,
C3 ;	.2 .4 .6 .8			CF92FV1H392J CF92FV1H113J CF92FV1H393J CE04HW1E100MEL	MF		
	.8 .10		*	RN14BK2C6811FTS RN14BK2C8252FTS	RN 6.81K F 1/6W RN 82.5K F 1/6W		
	-8 -8			NJM4560D-N 25K170(BL) 2SK170(V)	IC(0P AMP X2) FET FET		

E: Scandinavia & Europe H:Audio Club K: USA P: Canada W:Europe

T: England

U: PX(Far East, Hawaii) <u>UE</u>: AAFES(Europe)

X: Australia

M: Other Areas

⚠ indicates safety critical components.



SPECIFICATIONS

POWER OUTPUT

40 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.

Maximum continuous Power Output (DIN) 1 kHz at 4 ohms Maximum continuous Power Output (DIN) 1 kHz at 8 ohms		
Maximum continuous Power Output (IEC/NF) form 63 Hz to		
Total Harmonic Distortion at 8 ohms		
Total Harmonic Distortion		
(20 Hz-20,000 Hz, 8 ohms)	0.03% at 40 W	
(1 kHz, 8 ohms)		
Inter Modulation Distortion	0.003% at rated p	power into 8 ohms
Frequency Respose	1 Hz to 100 kHz/	+0 dB, -1 dB (IHF-'66)
Phono Frequency Response	RIAA Standardcur	ve ± 0.3 dB (20 Hz to 20 kHz)
Damping Factor	(1 kHz input 8 ohi	ms) 50
Signal to Noise Ratio	(IHF-A)	(CR-301A)
PHONO (MM)	86 dB	81 dB
PHONO (MC)		75 dB
TUNER/CD/AUX/TAPE	105 dB	82 dB
Input Sensitivity/Impedance		
PHONO (MM)		
PHONO (MC)		
TUNER/CD/AUX/TAPE	150 mV/47 k ohn	ns
Phono Maximum Input Level	200 / 0 020/	T. U. D a. 1. 1116-
PHONO (MM)	200 mV, 0,03%	I.H.D. at I KHZ
PHONO (MC)	15 mV, 0.03% 1	.H.D. at 1 kHz
Output Level/Impedance	150 1//220 1	
TAPE REC		
REC OUT	150 mV/220 onm	15
Cannels Separation (DIN) at 1,000 Hz	EO 4D	
PHONO (Terminated with 2.2 k ohms)		
AUX (Terminated with 47 k ohms + 250 pF)	40 dB	
Tone Control	. 10 40 10 141	
TREBLE		
BASS	± 10 dB at 100 F	12
Subsonic Filter	6 dB/oct. at 18 H	Iz
Transient Response Risetime	1.8 μs (VR MAX.))
General		
Power Requirements	120 V, 60 HzC	anada Models
·	220 V, 50 HzE	
	240 V, 50 HzE	ngland Models
Power Consumption	130 watts at rate	ed output power into 8 ohms watts at no
A.C. Outlet	Switched × 2 (100	0 W), Unswitched × 1 (400 W)
Dimensions	W 420 mm (16-9	9/16*)
	H 113 mm (4-7/	16")
	D 311 mm (12-1	/4")
Weight (Net)		
(Gross)	7.0 kg (15.4 lb)	Kenwood follows a policy of continuous advar in development. For this reason specifications changed without notice.

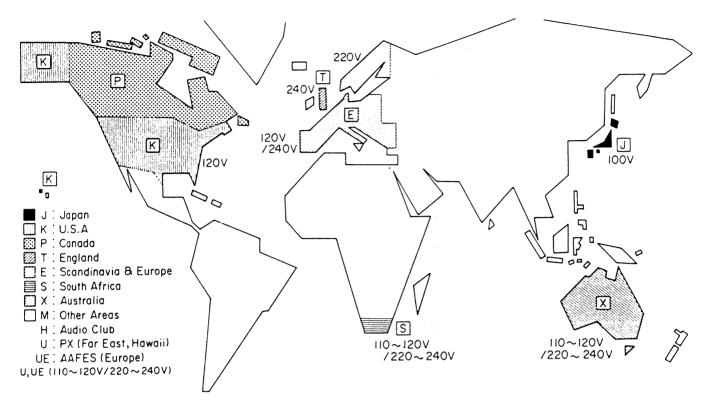
ncements ns may be

Kenwood poursuit une politique de progrès constants en ce qui doncerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige, Verbesserungen in der Ent-wicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.



WORLD MAP & AREA CODE



Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the CANADA (P) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list

TRIO-KENWOOD CORPORATION

Shionogi Shibuya Building, 17-5, 2-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD ELECTRONICS DIVISION OF KENWOOD U.S.A. CORPORATION 1315 E. Watsoncenter Rd., Carson, California 90745, U.S.A. 75 Seaview Drive, Secaucus, New Jersey 07094, U.S.A. TRIO-KENWOOD CANADA INC., 1070 Jayson Couft, Mississauga, Ontario, Canada L4W 2V5 TRIO-KENWOOD ELECTRONICS, N.V. Leuvensesteenweg 504 B-1930 Zaventem, Belgium TRIO-KENWOOD ELECTRONICS GmbH Rembrücker Str. 15, 6056 Heusenstamm, West Germany TRIO-KENWOOD FRANCE S.A. 5, Boulevard Ney, 75018 Paris, France TRIO-KENWOOD (AUSTRALIA) PTY, LTD. (INCORPORATED IN N.S.W.) 4E Woodcock Place, Lane Cove, N.S.W. 2066, Australia KENWOOD & LEE ELECTRONICS, LTD. Wang Kee Building, 5th Floor, 34-37, Connaught Road, Central, Hong Kong